

4. Revised Pages to the Draft EIR

In accordance with Section 15132 of the CEQA *Guidelines*, this Section presents the changes that were made to the Draft EIR to clarify or amplify its text in response to comments. Such changes are insignificant as the term is used in Section 15088.5(b) of the CEQA *Guidelines* in that no new potentially significant impacts are identified, and the effectiveness of identified mitigation is not reduced. Deletions to text are shown by strike-through and additions to text are shown by underline.

Executive Summary

<u>PAGE</u>	<u>CORRECTION:</u>
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ES-1	
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	Lines 18-20. Shore owns <u>138217</u> acres, of which the upland storage facilities occupy 70 acres of private land, with <u>and</u> approximately 443 <u>68</u> acres remaining vacant. The marine terminal is on 5.04 <u>14.04</u> acres of public land leased from the CSLC, with the upland storage facilities located on private land.
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ES-5	
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	Lines 8-11. Shore also once had connections to <u>a now</u> the inactive PG&E fuel oil line that could transfer crude oil both to and from Shore with possible connections to Shore Selby, ConocoPhillips Rodeo, and the Chevron Richmond Long Wharf to the west, and extends east to the city of Pittsburg, and ending near the former PG&E Pittsburg Power Plant.
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ES-14	
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	Lines 13-15. Any other liquid wastes that may need to be removed from vessels visiting the Shore terminal are discharged <u>through a black oil pipeline in compliance with MARPOL waste discharge requirements</u> to trucks provided by a contractor and taken to an appropriate waste handling facility.
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ES-15	
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	Lines 18-19. Vessels may take on lubricating oils from trucks at the Wharf which may have a potential to spill into the water.
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ES-42-ES-55	
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	Various provisions of Table ES-1 are changed or clarified to assist in interpretation and/or implementation.
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ES-57	
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	Lines 5-8. Because there would be no need to modify existing pipelines, the <u>Increased Use of</u> Existing Pipelines for Continued Operation of the
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Upland Facility Alternative is slightly superior to the Modification to Existing Pipelines for Continued Operation of Upland Facility (PG&E Pipeline) Alternative.

Description of Proposed Project

<u>PAGE</u>	<u>CORRECTION:</u>
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2-3	
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	Section 2.2.1 should reflect the correct acreage as noted in item ES-1 above.
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2-28	
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	Lines 39-42. Because there would be no need to modify existing pipelines, the <u>Increased Use of Existing Pipelines for Continued Operation of the Upland Facility Alternative is slightly superior to the Modification to Existing Pipelines for Continued Operation of Upland Facility (PG&E Pipeline) Alternative.</u>
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Operational Safety/Risk of Accidents

<u>PAGE</u>	<u>CORRECTION:</u>
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3.1-38	
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	Mitigation Measure OS-3c: Install Allision Avoidance System (AAS) at the terminal to prevent damage to the pier and/or vessel during docking operations. <u>Prior to implementing this measure, Shore shall consult with the San Francisco Bay Bar Pilots, the U.S. Coast Guard, and the staff of the CSLC and provide information that would allow the CSLC to determine, on the basis of such consultations and information regarding the nature, extent and adequacy of the existing berthing system, the most appropriate application and timing of an AAS at the Shore Terminal.</u>
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3.1-46	
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	Mitigation Measure OS-8a: As a lease condition, Shore shall agree to participate in an analysis to determine the adequacy of the existing VTS in the Bay Area, if such a study is conducted by a federal, state, or local agency during the life of the lease. Agencies such as the San Francisco Bay Harbor Safety Committee often conduct studies of safety issues within the Bay Area. As vessel traffic increases in and around the Bay Area and as technology improves, it may be necessary and feasible to upgrade and expand the VTS in and around the Bay Area. Shore shall participate in this analysis and contribute a pro-rata share toward the upgrade and expansion of the system, if required to do so by the CSLC. <u>Shore shall designate a representative(s) to participate in this analysis toward the upgrade or expansion of the VTS per terms, including financial, to be agreed upon with other study participants.</u>
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Water Quality

PAGE CORRECTION:

3.2-33

Mitigation Measure WQ-2: Because the Shore terminal does not have any facilities to treat ballast water for microorganisms, Shore shall ensure that any vessel using its terminal complies with the California Marine Invasive Species Control Act (Public Resources Code Sections 71200 through 71271. See Appendix E for key components of the Act). Vessels must exchange their ballast water in mid-ocean waters, before entering the waters of the state or they must retain all ballast water on board the vessel (Public Resources Code Section 71204.2). ~~Vessels that have not complied with the Act shall not be allowed to moor at the terminal. Shore shall complete a ballast water reporting form, as approved by CSLC, for each vessel using the terminal and fax it to the Ballast Water Program within 24 hours. This reporting form shall state the ballast water source and where the vessel discharged ballast water. Shore Terminals and CSLC staff shall meet annually every March throughout the lease term, discuss the effectiveness of this mitigation measure, and make adjustments to the implementation of this measure. Shore Terminals shall adhere to the current "Ballast Water Management for Control of Nonindigenous Species" as a part of Public Resources Code Section 71200 until January 1, 2010 or any date extension thereof. This measure will provide a tracking mechanism and shall remain in effect until such time that more stringent requirements are developed.~~ Shore will advise agents representing vessels that have called at the Shore Marine Terminal as of the date of adoption of the cited Mitigation Monitoring Program, and agents representing vessels that would be likely to call at the Shore Marine Terminal in the future about the California Marine Invasive Species Control Act. Shore will ensure that a Questionnaire containing the following questions is provided to the Vessel Operator, and inform the Vessel Operator that the Questionnaire should be completed on behalf of the vessel, by its Master or authorized representative, and provided to the CSLC's Marine Facilities Division, either electronically or by facsimile, prior to the vessel's entry into San Francisco Bay or in the alternative, at least 24 hours prior to the vessel's arrival at the Shore Marine Terminal.

The Questionnaire shall solicit the following information:

1. Does the vessel intend to discharge ballast water in San Francisco Bay, the Carquinez Strait or any other location(s) in a Delta waterway on its transit to the Shore Marine Terminal?
2. Does the vessel intend to discharge ballast water at the Shore Marine Terminal?

- 1
2 3. Which of the following means specified in the California Marine Invasive
3 Species Act (CMISA) has the vessel operator used or intend to use on the
4 current voyage to manage the vessel's ballast water: a mid-ocean exchange
5 (as defined in Section 71200(g)); retain all ballast on board; or discharge the
6 ballast water at the same location (as defined in Section 71204.2(c)(2))
7 where ballast originated, provided ballast water was not mixed with ballast
8 water taken on in an area other than mid-ocean waters?
9

10 3.2-35 Lines 7-9. Any other liquid wastes that may need to be removed from vessels
11 visiting the Shore terminal are discharged through a black oil pipeline in
12 compliance with MARPOL waste discharge requirements~~to trucks provided~~
13 ~~by a contractor and taken to an appropriate waste handling facility.~~
14

15 3.2-36

16 **Mitigation Measure WQ-5:** ~~Shore Terminals shall require that vessel~~
17 ~~operators document that vessels using the marine terminal have had no~~
18 ~~new applications of TBT or other metal-based anti-fouling paints applied~~
19 ~~after January 1, 2003. Beginning in 2008 Shore Terminals shall require~~
20 ~~deny moorage to vessels mooring at its dock without prior proof of~~
21 ~~compliance with the IMO mandate prohibiting the presence of organotin-~~
22 ~~based biocides on ship hulls. Shore will advise agents representing vessels~~
23 that have called at the Shore Marine Terminal as of the date of adoption of
24 the cited Mitigation Monitoring Program, and agents representing vessels
25 that would be likely to call at the Shore Marine Terminal in the future about
26 the requirements of the 2008 IMO prohibition of TBT applications to vessel
27 hulls. Following the effective date of the IMO prohibition, Shore will ensure
28 that the Master or authorized representative of vessels intending to call at
29 the Shore Marine Terminal certify that their vessel is in compliance and
30 provide a copy of such certification to the CSLC's Marine Facilities Division,
31 either electronically or by facsimile, prior to the vessel's entry into San
32 Francisco Bay or in the alternative, at least 24 hours prior to the vessel's
33 arrival at the Shore Marine Terminal.
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35 3.2-37 Lines 7-8. Vessels may take on lubricating oils ~~from trucks~~ at the wharf,
36 which have a potential to spill into the water.

37
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39 **Mitigation Monitoring**

40
41 **PAGE** **CORRECTION:**
42

Table 8-1 The Mitigation Monitoring Program from Section 8.0 of the Draft EIR is modified to reflect changes and clarifications as noted elsewhere in the provisions of this Final EIR.

Table ES-1
Summary of Impacts and Mitigation Measures for Proposed Project

Impact Classes:

- Class I** – (significant adverse impact that remains significant after mitigation);
- Class II** – (significant adverse impact that can be eliminated or reduced below an issue’s significance criteria);
- Class III** – (adverse impact that does not meet or exceed an issue’s significance criteria); or
- Class IV** – (beneficial impact).

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
OPERATIONAL SAFETY/RISK OF UPSET			
OS-1	There are no deficiencies with the existing deck drainage system or procedures that would pose a risk for, or increase the potential for spills at the terminal from routine operations.	III	None required.
OS-2	Potential impacts to public safety from a gasoline release are less than significant since the vapors evaporate quickly.	III	None required.
OS-3	Shore’s response capability for containment of spills during transfer operations would be adverse and significant for spills greater than 50 bbls, and range from spills that can be contained during first response efforts with rapid cleanup (Class II), to those complex spills that result in a significant impact (Class I) with residual effects	I or II	OS-3a: Provide quick release devices that would allow a vessel to leave the wharf as quickly as possible in the event of an emergency (fire or accident that could lead to a spill) that could impact the wharf or the vessel. OS-3b: Install tension monitoring devices on the wharf that would avoid excess

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	after mitigation.		<p>strain on mooring lines and avoid damage that could result in spills.</p> <p>OS-3c: Install Allision Avoidance System (AAS) at the terminal to prevent damage to the pier and/or vessel during docking operations. <u>Prior to implementing this measure, Shore shall consult with the San Francisco Bay Bar Pilots, the U.S. Coast Guard, and the staff of the CSLC and provide information that would allow the CSLC to determine, on the basis of such consultations and information regarding the nature, extent and adequacy of the existing berthing system, the most appropriate application and timing of an AAS at the Shore Terminal.</u></p> <p>OS-3d: Develop a comprehensive preventative maintenance program for the wharf that includes periodic inspection of all components related to transfer operations. The program shall be subject to review and approval by the CSLC.</p>
OS-4	Spills from the terminal during non-transfer periods would be associated with pipelines and are considered a significant (Class II) impact if spills are less than 50 bbls, or significant (Class I) impacts for spills greater than 50 bbls.	I or II	Implement measure OS-3d. (See also GEO-11.)

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
OS-5	Shore Terminals Wharf Operations Manual requires minor revisions to become current.	II	OS-5: Shore Terminals shall update and bring the Wharf Operations Manual current. Revise the manual by providing current names of responsible persons at the terminal and the names of the current response contractors. Submit the Manual to the CSLC for review and approval within 6 months of lease implementation.
OS-6	Public areas are beyond the hazard footprint boundary, thus fires and explosions would not cause a public safety risk. However, the wharf Operations Manual does not address fire emergency procedures and the wharf does not meet detection/suppression system requirements.	II	OS-6a: Shore shall implement mitigation measure OS-3a to provide for quick release devices that would allow a vessel to depart the wharf quickly would help in the event of a fire. OS-6b: Shore Terminals shall develop a set of procedures for dealing with tank vessel fires and explosions for tankers berthed at the Shore terminal. The procedures should include the steps to follow in the event of a tank vessel fire and describe how Shore and the vessel will coordinate activities. The procedures shall also identify other capabilities that can be procured if necessary in the event of a major incident. The procedures shall be submitted to CSLC within 6 months of lease renewal. CSLC shall have final approval of the plan. OS-6c: Shore Terminals shall ensure that the fire detection/ suppression system conforms to the approved MOTEMS, Section 8.0.
OS-7	The site is secure from public access.	III	None required.
OS-8	Spills from accidents in the Bay could result in impacts to water quality or biological resources that could be significant adverse (Class II) impacts for those that can be contained during first response efforts; or significant adverse (Class I) impacts that would have residual impacts. While Shore does not have legal responsibility for tankers, it does have responsibility to participate in improving general response capabilities.	I or II	OS-8a: As a lease condition, Shore shall agree to participate in an analysis to determine the adequacy of the existing VTS in the Bay Area, if such a study is conducted by a federal, state, or local agency during the life of the lease. Agencies such as the San Francisco Bay Harbor Safety Committee often conduct studies of safety issues within the Bay Area. As vessel traffic increases in and around the Bay Area and as technology improves, it may be necessary and feasible to upgrade and expand the VTS in and around the Bay Area. Shore shall participate in this analysis and contribute a pro-rata share toward the upgrade and expansion of the system, if required to do so by the CSLC. Shore shall designate a representative(s) to participate in this analysis toward the upgrade or expansion of the VTS per terms, including financial, to be agreed upon with other study participants. OS-8b: As a lease condition, Shore shall agree to respond to the spill as if it were its own, without assuming liability, until such time as the vessel's response organization can take over management of the response actions in a coordinated

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			manner.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
WATER QUALITY			
WQ-1	Disturbed sediments could cause a brief, localized depression in dissolved oxygen concentrations, but would disperse rapidly in strong tidal currents and tidal mixing with Bay waters of high dissolved oxygen concentration. Such events would occur for an hour or less during a 24-hour period and be limited to the immediate vicinity of the terminal.	III	None required.
WQ-2	Discharge of ballast water that contains harmful microorganisms could impair several of the project area's beneficial uses, including commercial and sport fishing, estuarine habitat, fish migration, preservation of rare and endangered species, water contact recreation, non-contact water recreation, fish spawning, and wildlife habitat.	I	<p>WQ-2: Shore terminal does not have any facilities to treat ballast water for microorganisms, so Shore shall ensure that any vessel using its terminal complies with the California Marine Invasive Species Control Act (Public Resources Code Sections 71200 through 71271. See Appendix E for key components of the Act). Vessels must exchange their ballast water in mid-ocean waters, before entering the waters of the state or they must retain all ballast water on board the vessel (Public Resources Code Section 71204.2). Vessels that have not complied with the Act shall not be allowed to moor at the terminal. Shore shall complete a ballast water reporting form, as approved by CSLC, for each vessel using the terminal and fax it to the Ballast Water Program within 24 hours. This reporting form shall state the ballast water source and where the vessel discharged ballast water. Shore Terminals and CSLC staff shall meet annually every March throughout the lease term, discuss the effectiveness of this mitigation measure, and make adjustments to the implementation of this measure. Shore Terminals shall adhere to the current "Ballast Water Management for Control of Nonindigenous Species" as a part of Public Resources Code Section 71200 until January 1, 2010 or any date extension thereof. This measure will provide a tracking mechanism and shall remain in effect until such time that more stringent requirements are developed. Shore will advise agents representing vessels that have called at the Shore Marine Terminal as of the date of adoption of the cited Mitigation Monitoring Program, and agents representing vessels that would be likely to call at the Shore Marine Terminal in the future about the California Marine Invasive Species Control Act. Shore will ensure that a Questionnaire containing the following questions is provided to the Vessel Operator, and inform the Vessel Operator that the Questionnaire should be completed on behalf of the vessel, by its Master or authorized representative, and provided to the CSLC's Marine Facilities Division, either electronically or by facsimile, prior to the vessel's entry into San Francisco</p>

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
			<p><u>Bay or in the alternative, at least 24 hours prior to the vessel's arrival at the Shore Marine Terminal.</u></p> <p><u>The Questionnaire shall solicit the following information:</u></p> <ol style="list-style-type: none"> <u>1. Does the vessel intend to discharge ballast water in San Francisco Bay, the Carquinez Strait or any other location(s) in a Delta waterway on its transit to the Shore Marine Terminal?</u> <u>2. Does the vessel intend to discharge ballast water at the Shore Marine Terminal?</u> <u>3. Which of the following means specified in the California Marine Invasive Species Act (CMISA) has the vessel operator used or intend to use on the current voyage to manage the vessel's ballast water: a mid-ocean exchange (as defined in Section 71200(g)); retain all ballast on board; or discharge the ballast water at the same location (as defined in Section 71204.2(c)(2)) where ballast originated, provided ballast water was not mixed with ballast water taken on in an area other than mid-ocean waters?</u>
WQ-3	Spills of sanitary wastewater, bilge water, and non-segregated ballast water, could degrade water quality and many spills would constitute chronic long-term degradation of water quality.	II	WQ-3: Shore shall prepare a SWPPP for the marine terminal that includes Best Management practices (BMPs) specifically to prevent leaks and spills during transfer of liquids between vessels and trucks on the wharf. The SWPPP shall be prepared within 6 months of lease implementation and reviewed by the CSLC and be available to the RWQCB.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
WQ-4	The slow leaching of zinc anodes may increase metal concentrations, but is less than significant; Cooling water discharges on water quality would be negligible and not exceed California Thermal Plan limitations. A contracted garbage disposal firm disposes the terminal operations trash.	III	None required.
WQ-5	Marine anti-fouling paints are highly toxic containing copper, sodium, zinc, and tributyltin (TBT) and their use on vessels associated with the Shore terminal is considered significant.	I	WQ-5: Shore Terminals shall require that vessel operators document that vessels using the marine terminal have had no new applications of TBT or other metal-based anti-fouling paints applied after January 1, 2003. Beginning in 2008 Shore Terminals shall require deny moorage to vessels mooring at its dock without prior proof of compliance with the IMO mandate prohibiting the presence of organotin-based biocides on ship hulls. Shore will advise agents representing vessels that have called at the Shore Marine Terminal as of the date of adoption of the cited Mitigation Monitoring Program, and agents representing vessels that would be likely to call at the Shore Marine Terminal in the future about the requirements of the 2008 IMO prohibition of TBT applications to vessel hulls. Following the effective date of the IMO prohibition, Shore will ensure that the Master or authorized representative of vessels intending to call at the Shore Marine Terminal certify that their vessel is in compliance and provide a copy of such certification to the CSLC's Marine Facilities Division, either electronically or by facsimile, prior to the vessel's entry into San Francisco Bay or in the alternative, at least 24 hours prior to the vessel's arrival at the Shore Marine Terminal.
WQ-6	Routine vessel maintenance would have the potential to degrade water quality due to chronic spills during transfers of lubricating oils.	II	WQ-6: Implement WQ-3 for preparation of a SWPPP.
WQ-7	Stormwater runoff from the Shore terminal may contribute pollutants to the Bay in concentrations that may adversely affect some benthic species within the local area.	II	WQ-7: Implement WQ-3, plus additional BMPs to reduce the input of chemicals to the Bay from the marine terminal, including (at a minimum) (1) conducting all vehicle maintenance on land not over water or marshland, (2) berming all areas on the pier where maintenance activities are being conducted and cleaning up all spilled contaminants before berms are removed, (3) washing the surface of the pier to the extent practical and directing washwater into sumps, (4) maintenance of sumps, and (5) posting signs to educate all workers to the importance of keeping contaminants from entering the Bay.
WQ-8	The effects of dredging and dredged material disposal on water quality are regulated and	III	None required.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	subject to acquisition of a dredging permit prior to dredging.		
WQ-9	Potential impacts on water quality can result from leaks or spills. Small leaks or spills (less than 50 bbl) related to Shore operations could result in significant (Class II) impacts, while large spills (greater than 50 bbl) could result in significant adverse impacts (Class I).	I or II	WQ-9: Implement OS-3a through OS-3d (Operational Safety/Risk of Upset).

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
WQ-10	A significant impact to water quality (Class I or II impact) could result from leaks or an accidental spill of crude oil or oil product from a vessel spill along tanker routes either in San Francisco Bay or outer coast waters.	I or II	WQ-10: Shore Terminals shall implement mitigation measures OS-8a and OS-8b of the Operational Safety/Risk of Upset Section addressing potential participation in VTS upgrade evaluations, and Shore response actions for spills at or near the terminal.
BIOLOGICAL RESOURCES			
BIO-1	Shore terminal ship traffic operations represents an incremental amount compared to the background noise of ship traffic in the Bay and along outer coast tanker routes. Disturbance to fishes and birds from routine operations at and near the terminal are less than significant.	III	None required.
BIO-2	The area near the Shore Terminals berth where propeller wash and bow thrusters may disturb sediments is very small compared to the amount of benthic habitat in the project area, and impacts of tanker sediment turbulence on benthic communities are less than significant.	III	None required.
BIO-3	Loss of juvenile Dungeness crabs and young Chinook salmon would be significant if dredging occurs when juveniles are migrating through the area. Less than significant impacts occur to plankton, other benthos, other fishes, and birds.	II	BIO-3a: In order to reduce the entrainment of juvenile Dungeness crab, Shore Terminals shall schedule dredging to avoid the month of September when juvenile Dungeness crabs are most abundant in the project area. BIO-3b: Although chances of entrainment of salmon is relatively low, to protect the salmon, Shore Terminals shall schedule dredging in July and August when winter and spring run Chinook salmon smolt activity is lowest.
BIO-4	Invasive organisms/introduction of non-indigenous species in segregated ballast water released in the Bay could have significant impacts to plankton, benthos, fishes, and birds.	I	BIO-4: Implement WQ-2 addressing ballast water management.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
BIO-5	Contaminant inputs into the water from Shore terminal operations are low when compared to other pollutant sources in the Bay. The impacts on plankton, benthos, fishes, and birds are less than significant.	III	None required.
BIO-6	A spill can significantly impact the biota at or near the Shore terminal have the potential to spread through Carquinez Strait and into Suisun and San Pablo Bays. Vulnerable biota are plankton, benthos, eelgrass, fishes, marshes, birds, and mammals. Per Operational Safety/Risk of Accidents section, small spills at the terminal (less than 50 bbls) should be able to be contained (Class II impacts). However, spills larger than 50 bbls may not be able to be contained and Shore Terminals may not have adequate boom to protect all the sensitive areas at the most risk that could be oiled within 3 hours of a spill from the terminal. Impacts from large spills are considered to be significant adverse (Class I) impacts.	I and II	<p>BIO-6a: Implement all the mitigation measures included in OS-3 through OS-6 in Operational Safety/Risk of Accidents to either lower the probability of an oil spill or increase response capability.</p> <p>BIO-6b: Demonstrate to the satisfaction of the CSLC that Shore Terminals can successfully implement its Oil Spill Response Plan and can deploy within 3 hours all the boom necessary to simultaneously protect all the sensitive resources at risk of contact with oil within 3 hours from a spill at Shore Terminals.</p> <p>BIO-6c: Identify a source of sonic hazing devices to scare birds away from Suisun Shoal and demonstrate to the CSLC that these devices can be deployed within 3 hours of a spill at Shore Terminals.</p> <p>BIO-6d: When a spill occurs, develop procedures for clean up of any sensitive biological areas contacted by oil, in consultation with biologists from CDFG and USFWS, to avoid damage from clean up activities.</p> <p>BIO-6e: If damage occurs, the last resort is restoration and compensation. Any loss of resources shall be documented as soon as possible after a large spill. The sampling methods and design should be determined beforehand, and the plan should include provisions for getting resources onsite as soon as possible so that post-spill studies can begin immediately.</p>
BIO-7	A significant impact to biological resources could result from spills of crude oil or product from a vessel in transit along tanker routes either in San Francisco Bay or outer coast waters.	I and II	BIO-7: Implement OS-8a and OS-8b of the Operational Safety/Risk of Upset section addressing potential participation in VTS upgrade evaluations, and Shore response actions for spills at or near the terminal.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
COMMERCIAL AND SPORTS FISHERIES			
FSH-1	Shrimp trawling near the Shore terminal, is small when compared with landing from other portions of the Bay and Shore operations and the fishery is located at the Benicia Bridge away from terminal operations. No shoreline fishing occurs within 0.5 mile of the wharf. Space use conflicts with commercial and sport fishing activities are considered to be less than significant.	III	None required.
FSH-2	Invasive species discharged from ballast water could impair water quality (Impact WQ-2) and biological resources (Impact BIO-4) would also impair commercial and sports fishing activities in the Bay and outer coast.	I	FSH-2: Implement WQ-2 for ballast water management.
FSH-3	Shore contributes incrementally to water quality contamination and thus fish contamination, which could result in a loss of fishing opportunities because anglers prefer to stay away from contaminated fishing areas.	II	FSH-3: Implement WQ-3 and WQ-7 for preparation of a SWPPP and additional BMP's.
FSH-4	Space use conflicts between transiting vessels serving the Shore marine terminal could occur if commercial shrimp trawlers operate 12 hours or more per day during the fishing season.	II	FSH-4: Shore Terminals shall notify the shrimp trawlers operating in Carquinez Strait of increases in vessel transits associated with terminal operations. In addition, Shore shall inform incoming vessel operators of shrimp trawling activities near the terminal.
FSH-5	Space use conflicts between transiting vessels serving the Shore marine terminal and commercial herring operators could occur resulting in interference or displacement of herring fishing activities.	II	FSH-5: Shore Terminals shall notify the herring fishery during the herring season of vessel transits. Shore shall also participate in the Pacific herring commercial fishery annual public scoping and hearing process, part of CDFG's annual review of herring commercial fishing regulations. CDFG has the authority to modify or develop regulations to address space use conflicts between the fishery and Shore's operations.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
FSH-6	Space use conflicts between sport fisheries in the Bay and transiting vessels serving the Shore marine terminal are small and considered less than significant.	III	None required.
FSH-7	Vessel operators handling crude oil voluntarily agree to maintain a minimum distance of 50 nautical miles offshore the mainland. Most fishing off California is generally within 15 to 20 miles of shore through commercial and sport fishing grounds. No space use conflicts occur.	III	None required.
FSH-8	Shrimp, herring and sport fisheries in central and north San Francisco Bay, San Pablo Bay, Carquinez Strait, Napa River and Honker Bay are at highest risk of spill contamination. Areas upstream of the confluence of the Sacramento and San Joaquin rivers may also suffer harm. In addition the Bay marinas, launch ramps and fishing access points may be threatened, contaminated or closed. Impacts to Bay commercial and sport fisheries would result from oil spill accidents originating at the Shore marine terminal or from transiting tankers that service the terminal.	I or II	<p>FSH-8a: Implement mitigation measures OS-3 through OS-6 in Operational Safety/Risk of Accidents, and mitigation measures BIO-6b through BIO-6d to lower the probability of oil spills and increase response capability.</p> <p>FSH-8b: Post notifications at spill sites and marinas, launch ramps and fishing access points to warn fishing interests of locations of contaminated sites. Notices shall be written in English and Spanish, and be posted in areas most likely to be seen by fishing interests.</p> <p>FSH-8c: Provide financial compensation in accordance with the California Oil Spill Prevention and Response Act.</p> <p>FSH-8d: Contribute to independent public or private organizations, acceptable to the CSLC, who evaluate the effectiveness of mitigation measures (results of the evaluation would be available to public decision-makers to ensure refinement, if necessary, modification of mitigation measures). Evaluation would be done only after an accident and would include monitoring using scientifically accepted protocols. Contributions would be determined by the level of impact and in cooperation with the various organizations, agencies, and the CSLC.</p>

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
LAND USE AND RECREATION			
LU-1	Marine terminal operations would not conflict with any existing or future planned policy issues or plans.	III	None required.
LU-2	Marine terminal operations would be compatible with adjacent and proximate land uses. Physical land use impacts would be less than significant.	III	None required.
LU-3	A number of recreational facilities (designated parks, wildlife preserves, open space, etc.) and recreational uses (nature viewing, boating, fishing, surfing, etc.) are within the potential area that could be impacted by the spread of oil. Shoreline and water-related uses would be disrupted by oil on the shoreline and in the water and result in significant adverse (Class I and II) impacts.	I and II	LU-3: Mitigation measures for spills at the Shore terminal would be the responsibility of Shore Terminal operations. Specific measures are those presented in Operational Safety/Risk of Upset; Water Quality; Biological Resources; and Commercial and Sport Fisheries.
LU-4	Spills that beach along sensitive land use areas or heavily used areas including recreational areas would limit or preclude such uses and result in significant adverse (Class I or II) impacts, depending on the various characteristics of a spill and its residual effects.	I and II	LU-4: Shore Terminals shall implement measures OS-8a and OS-8b in Operational Safety/Risk of Upset. Other mitigation measures for accidents in the shipping lanes would not be Shore Terminals responsibility, but would fall to the vessel operator/owner.
AIR QUALITY			
AQ-1	No major construction is proposed as part of the 20-year lease. Minor upgrades, maintenance and repairs would be less than significant.	III	None required.
AQ-2	Measured and calculated criteria pollutant emissions are below existing yearly BAAQMD permitted levels. Continued operation of the marine terminal at current throughput levels would not result in air quality emissions impacts.	III	None required.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
AQ-3	Since the facility is already operational, worker commute emissions are already part of ambient conditions, thus non-permitted emissions impacts are less than significant.	III	None required.
AQ-4	Dredging is a permitting activity that is calculated into the Bay Area's baseline conditions. Air quality emissions will not increase from continued dredging activities over the term of the proposed 20-year lease.	III	None required.
AQ-5	Tanker pumping, transit, and/or tug combustion emissions could allow for an increase in throughput at the marine terminal. Thus, future operational emissions (both indirect and direct) have the potential to exceed daily and yearly significance thresholds (existing permit limits).	II	AQ-5: Mitigation should be focused on the use of best available control technology (BACT) available at the time of any expansion of the upland facility. Increased operations would require additional permitting through the BAAQMD, which would set limitations on allowable emissions levels and require offsets as necessary.
AQ-6	The Shore marine terminal does not emit odors that are/have been reported in the local area. No sensitive receptors are located in the area.	III	None required.
AQ-7	The Shore terminal is in compliance with the BAAQMD permitting for hazardous and toxic pollutants.	III	None required.
NOISE			
N-1	Because the marine terminal already exists, it is considered part of the ambient noise environment. It is located in an industrial area with no nearby sensitive receptors. Over the lease period, no sensitive receptors are to be constructed proximate to the terminal.	III	None required.
N-2	No expansion of marine terminal operations are expected to occur over the 20-year lease period. Vessel activities are expected to remain the same as that of existing conditions.	III	None required.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
VEHICULAR AND RAIL TRANSPORTATION			
TR-1	No increase in vehicular traffic from wharf operations would occur during the lease period.	III	None required.
VISUAL RESOURCES/LIGHT AND GLARE			
VR-1	Over the lease period, only one tanker would be berthed at the Shore wharf at a time, which is the same as existing conditions. Also, as the wharf cannot be seen from Waterfront Road, views are obstructed and the wharf is distant.	III	None required.
VR-2	Spills would change the color and texture of water and shoreline conditions. The visual impacts of a spill could last for a long period of time, depending on the level of physical impact and cleanup ability, and are considered to be adverse and significant (Class I or II).	I or II	VR-2: Mitigation measures for oil spill impacts include those measures for contingency planning and response as presented in Operational Safety/Risk of Upset and Biological Resources.
VR-3	Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of viewers would result in a negative impression of the viewshed and result in significant adverse (Class I or II) impacts, depending on the various characteristics of a spill and its residual effects.	I or II	VR-3: Shore Terminals shall implement measures OS-8a and OS-8b in Operational Safety/Risk of Upset. Other mitigation measures for accidents in the shipping lanes would not be Shore Terminals responsibility, but would fall to the vessel operator/owner.
CULTURAL RESOURCES			
CR-1	The Shore marine terminal is not eligible as a historic resource and there are no other potential historical resources in the project area, thus there are no impacts.	III	None required.
CR-2	There are no shipwrecks near the wharf, thus there would be no impacts on cultural resources from maintenance dredging.	III	None required.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
GEOLOGICAL RESOURCES/STRUCTURAL INTEGRITY			
GEO-1	There are no shipwrecks near the wharf, thus there would be no impacts on cultural resources from maintenance dredging.	III	None required.
GEO-2	The impact of berth dredging, natural scour or accumulation of soil in steep slopes near or adjacent to wharf piles should be considered in soil-structure interaction. In addition, liquefaction and lateral spreading resulting from any moderate earthquake may create a significant adverse impact.	II	<p>GEO-2a: In the event that such scour has been noted, then Shore shall conduct additional analysis to evaluate the potential for lateral spreading. Loss of lateral support and laterally induced additional loads should be incorporated into the overall analysis and/or design. This analysis should be conducted concurrently with a site specific liquefaction analysis (see Impact GEO-3).</p> <p>GEO-2b: Seismic evaluation of the structures and their foundations should be included in the structural analysis and geotechnical investigation in compliance with Section 6 of the approved MOTEMS. The results and recommendations of the evaluation shall be coordinated with the mooring analysis recommendations and implementation of corrections (see GEO-10).</p>
GEO-3	The site has not had an industry standard liquefaction evaluation performed. As such, the potential for impacts from seismically induced settlement are unknown but potentially significant.	II	GEO-3: Shore shall comply with the approved MOTEMS. As such, a site specific liquefaction evaluation shall be required to be completed within 6 months after start of the lease. The results and recommendations of the evaluation shall be coordinated with the mooring analysis recommendations and implementation of corrections (see GEO-10).
GEO-4	Shore operators may not have adequate warning time to allow a vessel to depart from the wharf to avoid damage to the vessel and/or the wharf from a tsunami.	II	<p>GEO-4a: As soon as possible, after notification of a tsunami, Shore operators shall release the vessel from its mooring and the vessel shall move away from the wharf.</p> <p>GEO-4b: Shore shall comply with Section 5 of the approved MOTEMS mooring analysis (see GEO-10).</p>
GEO-5	During a Level 2 seismic event, the batter piles are expected to behave in a nonlinear fashion. The loading platform would undergo significant softening as a result	III	None required.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
	of the global nonlinear behavior. However, structural collapse is not expected to occur as a result of the Level 2 earthquake.		

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
GEO-6	If secondary breasting dolphins are not upgraded, the potential for significant adverse impacts from an oil spill is small.	III	None required.
GEO-7	Damage to catwalks from a seismic event would not result in an oil spill, and damage can easily be repaired.	III	None required.
GEO-8	During an earthquake damage could occur in the batter pile to bent cap connections and could damage the trestle.	II	GEO-8: Within one year of the new lease, Shore shall reevaluate the loads on the bents, check the batter pile bolt connections, and adopt corrective mitigation measures.
GEO-9	The anchor bent batter pile to bent cap bolts are not capable of transmitting the predicted transverse seismic loads that could result in a loss of support for the petroleum pipelines and a spill could occur.	II	GEO-9: Shore shall reevaluate the loads in the anchor bents and batter pile connections within one year of the new lease. The anchor bents inadequacy should be addressed and corrective measures implemented within 2 years.
GEO-10	The last mooring analysis used data from sites nearby that may not reflect actual wharf conditions. There could be impacts associated with berthing and mooring capacity under actual currents, tides, and winds, with the potential for oil releases.	II	GEO-10a: Shore shall collect 12 months of data on currents, tide levels, and wind speed/direction at the wharf. GEO-10b: If data analysis shows that currents, tide, and wind speeds are significantly different (as assessed by CSLC) from that assumed in the previous analysis, Shore shall conduct a new mooring analysis consistent with the approved MOTEMS Section 5 requirements within 12 months. GEO-10c: Within 12 months of the start of the new lease, Shore shall conduct a passing vessel study for vessels navigating within 500 feet of the wharf per MOTEMS requirements.
GEO-11	Pipeline stresses on the 30-inch pipeline in relation to movement of the loading platform and trestle, and on the pipeline expansion loop support interface along the trestle are unknown. The potential may exist for damage to the pipeline and oil leaks.	II	GEO-11a: Within 6 months of the start of the lease, Shore shall conduct a pipeline analysis on the 30-inch pipeline and the pipeline loop. GEO-11b: Shore shall ensure that all pipelines for oil transfer meet MOTEMS and CSLC regulations in CCR Title 2, Division 3, Chapter 1, Article 5.5, Sections 2564 through 2570 for ensuring pipeline integrity.

Table ES-1 (Continued)
Summary of Impacts and Mitigation Measures for Proposed Project

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
ENVIRONMENTAL JUSTICE			
EJ-1	Overall water quality, biological, and commercial and sport fisheries impacts would affect resources used by the entire Bay community, whether or not they are minority or low-income, and would therefore not have a disproportionate impact on a minority of low-income population, except for sports fisheries.	II	EJ-1: Should an oil spill from Shore Terminals extend beyond .5 mile from the terminal and preclude sport fishing activities for more than two days, Shore Terminals shall contribute either funds or food stuffs to a local food bank in an amount sufficient, as determined in conjunction with the CSLC, to replace food sources that would have been supplied by activities within the affected areas.

**Table 8-1
Operational Safety/Risk of Upset**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
OS-3: Shore's response capability for containment of spills during transfer operations would be adverse and significant for spills greater than 50 bbls, and range from spills that can be contained during first response efforts with rapid cleanup (Class II), to those complex spills that result in a significant impact (Class I) with residual effects after mitigation.	OS-3a: Provide quick release devices that would allow a vessel to leave the wharf as quickly as possible in the event of an emergency (fire or accident that could lead to a spill) that could impact the wharf or the vessel.	CSLC monitor to observe devices after installation.	Reduces potential for damages and spills. In the event of an emergency, the wharf will be able to quickly release a vessel to prevent spread of oil.	CSLC	Within 12 months of lease implementation.
	OS-3b: Install tension monitoring devices on the wharf that would avoid excess strain on mooring lines and avoid damage that could result in spills.	CSLC monitor to observe devices after installation.	Reduces potential for damages and spills.	CSLC	Within 12 months of lease implementation.
	OS-3c: Install Allision Avoidance System (AAS) at the terminal to prevent damage to the pier and/or vessel during docking operations. . <u>Prior to implementing this measure, Shore shall consult with the San Francisco Bay Bar Pilots, the U.S. Coast Guard, and the staff of the CSLC and provide information that would allow the CSLC to determine, on the basis of such consultations and information regarding the nature, extent and adequacy of the existing berthing system, the most appropriate application and timing of an AAS at the Shore Terminal.</u>	CSLC monitor to observe devices after installation.	Reduces potential for damages and spills.	CSLC	Within 12 months of lease implementation.
	OS-3d: Develop a comprehensive preventative maintenance program for the wharf that includes periodic inspection of all components related to transfer operations. The program shall be subject to review and approval by the CSLC.	Shore shall submit program for review and approval to CSLC.	Reduces potential for damages and spills.	CSLC	Within 12 months of lease implementation.
OS-4: Spills from the terminal during non-transfer periods would be associated with pipelines and are considered a significant (Class II) impact if spills are less than 50 bbls,	OS-4: Implement measure OS-3d. (See also GEO-11.)	See OS-3d.	See OS-3d.	See OS-3d.	See OS-3d.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

Shore Marine Terminal

4. REVISED PAGES TO THE DRAFT EIR

or significant (Class I) impacts for spills greater than 50 bbls.					
OS-5: Shore Terminals Wharf Operations Manual requires minor revisions to become current.	OS-5: Shore Terminals shall update and bring the Wharf Operations Manual current. Revise the manual by providing current names of responsible persons at the terminal and the names of the current response contractors. Submit the Manual to the CSLC for review and approval within 6 months of lease implementation.	Shore to update Wharf Operations Manual to current. Submit for USCG and CSLC review.	Assures that correct and current information is contained in the manual	CSLC and USCG	Submit for review and approval within 6 months of lease implementation.

**Table 8-1 (Continued)
Operational Safety/Risk of Upset**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
OS-6: Public areas are beyond the hazard footprint boundary, thus fires and explosions would not cause a public safety risk. However, the wharf Operations Manual does not address fire emergency procedures and the wharf does not meet detection/suppression system requirements.	OS-6a: Shore shall implement mitigation measure OS-3a to provide for quick release devices that would allow a vessel to depart the wharf quickly would help in the event of a fire.	See OS-3a.	See OS-3a.	See OS-3a.	See OS-3a.
	OS-6b: Shore Terminals shall develop a set of procedures for dealing with tank vessel fires and explosions for tankers berthed at the Shore terminal. The procedures should include the steps to follow in the event of a tank vessel fire and describe how Shore and the vessel will coordinate activities. The procedures shall also identify other capabilities that can be procured if necessary in the event of a major incident.	Shore shall prepare and submit procedures to CSLC for review and approval.	Provides planning and procedures for emergency response.	CSLC	Submit to CSLC within 6 months of lease implementation.
	OS-6c: Shore Terminals shall ensure that the fire detection/suppression system conforms to the approved MOTEMS, Section 8.0.	Shore to review system and make necessary corrections. Monitor to observe devices after installation.	Reduces the risk of fire by providing necessary fire detection/suppression systems.	CSLC	Submit to CSLC within 6 months of least implementation.
OS-8: Spills from accidents in the Bay could result in impacts to water quality or biological resources that could be significant adverse (Class II) impacts for those that can be contained during first response efforts; or significant adverse (Class I) impacts that would have residual impacts. While Shore does not have legal responsibility for tankers, it does have responsibility to participate in improving general response capabilities.	OS-8a: As a lease condition, Shore shall agree to participate in an analysis to determine the adequacy of the existing VTS in the Bay Area, if such a study is conducted by a federal, state, or local agency during the life of the lease. Agencies such as the San Francisco Bay Harbor Safety Committee often conduct studies of safety issues within the Bay Area. As vessel traffic increases in and around the Bay Area and as technology improves, it may be necessary and feasible to upgrade and expand the VTS in and around the Bay Area. Shore shall participate in this analysis and contribute a pro-rata share toward the upgrade and expansion of the system, if required to do so by the CSLC. <u>Shore shall designate a representative(s) to participate in this analysis toward the upgrade or expansion of the VTS per terms, including financial, to be agreed upon with other study participants.</u>	This shall be implemented as a lease condition. Shore shall demonstrate to CSLC their participation in program strategies to protect sensitive resources.	Reduces potential damage to resources.	CSLC	Life of lease.
	OS-8b: As a lease condition, Shore shall agree to respond to the spill as if it were its own,	This shall be implemented as a	Reduces potential damage to	CSLC	Life of lease.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

	without assuming liability, until such time as the vessel's response organization can take over management of the response actions in a coordinated manner.	lease condition. CSLC monitor to observe emergency actions.	resources.		
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**Table 8-2
Water Quality**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
WQ-2: Discharge of ballast water that contains harmful microorganisms could impair several of the project area's beneficial uses, including commercial and sport fishing, estuarine habitat, fish migration, preservation of rare and endangered species, water contact recreation, non-contact water recreation, fish spawning, and wildlife habitat.	WQ-2: Shore shall ensure that any vessel using its terminal comply with the California Marine Invasive Species Control Act (Public Resources Code Sections 71200 through 71271). Vessels must exchange their ballast water in mid-ocean waters, before entering the waters of the state or they must retain all ballast water on board the vessel (Public Resources Code Section 71204.2). Vessels that have not complied with the Act shall not be allowed to moor at the terminal. Shore will advise agents representing vessels that have called at the Shore Marine Terminal as of the date of adoption of the cited Mitigation Monitoring Program, and agents representing vessels that would be likely to call at the Shore Marine Terminal in the future about the California Marine Invasive Species Control Act. Shore will ensure that a Questionnaire containing the following questions is provided to the Vessel Operator, and inform the Vessel Operator that the Questionnaire should be completed on behalf of the vessel, by its Master or authorized representative, and provided to the CSLC's Marine Facilities Division, either electronically or by facsimile, prior to the vessel's entry into San Francisco Bay or in the alternative, at least 24 hours prior to the vessel's arrival at	Shore shall complete a ballast water reporting form for each vessel using the terminal and fax it to the Ballast Water Program within 24 hours. This reporting form shall state the ballast water source and where the vessel discharged ballast water. Shore Terminals and CSLC staff shall meet annually every March throughout the lease term, discuss the effectiveness of this mitigation measure, and make adjustments to the implementation of this measure.	Shore Terminals shall adhere to the current "Ballast Water Management for Control of Nonindigenous Species" as a part of Public Resources Code Section 71200 until January 1, 2010 or any date extension thereof. This measure will provide a tracking mechanism and shall remain in effect until such time that more stringent requirements are developed.	CSLC	Life of lease

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

	<p><u>the Shore Marine Terminal.</u></p> <p><u>The Questionnaire shall solicit the following information:</u></p> <ol style="list-style-type: none"> <u>1. Does the vessel intend to discharge ballast water in San Francisco Bay, the Carquinez Strait or any other location(s) in a Delta waterway on its transit to the Shore Marine Terminal?</u> <u>2. Does the vessel intend to discharge ballast water at the Shore Marine Terminal?</u> <u>3. Which of the following means specified in the California Marine Invasive Species Act (CMISA) has the vessel operator used or intend to use on the current voyage to manage the vessel's ballast water: a mid-ocean exchange (as defined in Section 71200(g)); retain all ballast on board; or discharge the ballast water at the same location (as defined in Section 71204.2(c)(2)) where ballast originated, provided ballast water was not mixed with ballast water taken on in an area other than mid-ocean waters?</u> 				
WQ-3: Spills sanitary wastewater, bilge water and non-segregated ballast water could have the potential to degrade water quality.	WQ-3: Shore shall prepare a SWPPP for the marine terminal. The SWPPP shall include Best Management practices (BMPs) specifically to prevent leaks and spills during transfer of liquids between vessels and trucks on the wharf.	Shore shall prepare a SWPPP for CSLC review and approval.	Aggressive implementation of BMPs to reduce the input of chemicals to the Bay from operations on the wharf would reduce the Shore's input of these chemicals.	CSLC	Prepare SWPPP within 6 months of lease implementation. Maintain SWPPP, update as necessary for life of lease.
WQ-5: Marine anti-fouling paints are highly toxic	WQ-5: Shore Terminals shall require that vessel operators document that	Shore shall require vessels to document that they have no new	Until all TBT is phased out by 2008, vessels with old	CSLC	Life of lease.

containing copper, sodium, zinc, and tributyltin (TBT) and their use on vessels associated with the Shore terminal is considered significant.	vessels using the marine terminal have had no new applications of TBT or other metal-based anti-fouling paints applied after January 1, 2003. Beginning in 2008 Shore Terminals shall require deny moorage to vessels mooring at its dock without prior proof of compliance with the IMO mandate prohibiting the presence of organotin-based biocides on ship hulls. Shore will advise agents representing vessels that have called at the Shore Marine Terminal as of the date of adoption of the cited Mitigation Monitoring Program, and agents representing vessels that would be likely to call at the Shore Marine Terminal in the future about the requirements of the 2008 IMO prohibition of TBT applications to vessel hulls. Following the effective date of the IMO prohibition, Shore will ensure that the Master or authorized representative of vessels intending to call at the Shore Marine Terminal certify that their vessel is in compliance and provide a copy of such certification to the CSLC's Marine Facilities Division, either electronically or by facsimile, prior to the vessel's entry into San Francisco Bay or in the alternative, at least 24 hours prior to the vessel's arrival at the Shore Marine Terminal.	TBT applications (per IMO mandate). Documentation shall be kept at Shore, available for CSLC inspection.	applications of TBT on their hulls will visit Shore. Shore cannot feasibly require vessels to remove TBT from their hulls (until the IMO mandate is effective). Therefore, until all TBT is gone from vessels using the Shore marine terminal, impacts of organotins will remain.		
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^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

Table 8-2 (Continued)
Water Quality

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
WQ-6: Routine vessel maintenance would have the potential to degrade water quality due to chronic spills during transfers of lubricating oils.	WQ-6: Implement WQ-3 for preparation of a SWPPP.	See WQ-3.	See WQ-3.	See WQ-3.	See WQ-3.
WQ-7: Stormwater runoff from the Shore terminal may contribute pollutants to the Bay in concentrations that may adversely affect some benthic species within the local area.	WQ-7: Implement WQ-3, plus additional BMPs to reduce the input of chemicals to the Bay from the marine terminal, including (at a minimum) (1) conducting all vehicle maintenance on land not over water or marshland, (2) berming all areas on the pier where maintenance activities are being conducted and cleaning up all spilled contaminants before berms are removed, (3) washing the surface of the pier to the extent practical and directing washwater into sumps, (4) maintenance of sumps, and (5) posting signs to educate all workers to the importance of keeping contaminants from entering the Bay.	These BMPs shall be detailed in a SWPPP that Shore shall prepared specifically for the marine terminal and submit to CSLC for approval.	Aggressive implementation of BMPs to reduce the input of chemicals to the Bay from operations on the wharf would reduce Shore's input of these chemicals.	CSLC	Prepare SWPPP within 12 months of lease implementation. Maintain SWPPP, update as necessary for life of lease.
WQ-9: Potential impacts on water quality can result from leaks or spills and result in significant adverse impacts.	WQ-9: Implement OS-3a through OS-3d (Operational Safety/Risk of Upset).	See OS-3a through OS-3d.	See OS-3a through OS-3d.	See OS-3a through OS-3d.	See OS-3a through OS-3d.
WQ-10: A significant impact to water quality could result from leaks or an accidental spill of crude oil or oil product from a vessel spill along tanker routes either in San Francisco Bay or outer coast waters.	WQ-10: Shore Terminals shall implement mitigation measures OS-8a and OS-8b of the Operational Safety/Risk of Upset Section addressing potential participation in VTS upgrade evaluations, and Shore response actions for spills at or near the terminal.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.

**Table 8-3
Biological Resources**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria ^a	Responsible Agency	Timing
BIO-3: Loss of juvenile Dungeness crabs and young Chinook salmon would be significant if dredging occurs when juveniles are migrating through the area.	BIO-3a: Shore shall schedule dredging to avoid the month of September when juvenile Dungeness crabs are most abundant in the project area.	Shore shall coordinate with the CSLC and U.S. Army Corps of Engineers (Corps) who are the dredging permit holders on the scheduling of dredging operations.	Reduces potential impacts to juvenile Dungeness crabs.	CSLC	Prior to dredging.
	BIO-3b: Shore shall schedule dredging in July and August when winter and spring run Chinook salmon smolt activity is lowest.	Shore shall coordinate with the CSLC and U.S. Army Corps of Engineers (Corps) who are the dredging permit holders on the scheduling of dredging operations.	Reduces potential impacts to Chinook salmon smolt.	CSLC	Prior to dredging.
BIO-4: Invasive organisms/introduction of non-indigenous species in segregated ballast water released in the Bay could have significant impacts to plankton, benthos, fishes, and birds.	BIO-4: Implement WQ-2, in Water Quality, requires that Shore comply with the California Marine Invasive Species Act and the Ballast Water Management for Control of Nonindigenous Species Act.	See WQ-2.	See WQ-2.	See WQ-2.	See WQ-2.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

**Table 8-3 (Continued)
Biological Resources**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria`	Responsible Agency	Timing
BIO-6: Oil spills could have significant adverse impacts on biological resources. The resources at the most immediate risk of oiling from a spill at the Shore marine terminal are Suisun Shoal, Hastings Slough/Point, Edith/Seal Island, Bulls Head Marsh/Pacheco Creek, Martinez Marsh, and Benicia Marsh. Depending on conditions at the time of the spill, these areas could be contacted within 3 hours of a spill at the Shore marine terminal.	BIO-6a: Implement all the mitigation measures included in OS-3 through OS-6 in Operational Safety/Risk of Accidents to either lower the probability of an oil spill or increase response capability.	See OS-3 through OS-6.	See OS-3 through OS-6.	See OS-3 through OS-6.	See OS-3 through OS-6.
	BIO-6b: Shore shall demonstrate to the satisfaction of the CSLC that Shore Terminals can successfully implement its Oil Spill Response Plan and can deploy within 3 hours all the boom necessary to simultaneously protect all the sensitive resources at risk of contact with oil within 3 hours from a spill at terminal.	CSLC monitor to observe that Shore has the boom deployment capability.	Reduces spread of spill and damages to resources.	CSLC	Within 12 months of lease implementation.
	BIO-6c: Shore shall identify a source of sonic hazing devices to scare birds away from Suisun Shoal and demonstrate to the CSLC that these devices can be deployed within 3 hours of a spill at terminal.	CSLC monitor to observe that Shore has sonic hazing devices.	Reduces potential damages to birds.	CSLC	Within 12 months of lease implementation.
	BIO-6d: Procedures should be developed for clean up of any sensitive biological areas contacted by oil. In many oil spills, clean up has done at least as much damage as the spill itself. Decisions about clean up of sensitive areas should be made in consultation with biologists from CDFG and USFWS.	Shore shall develop and present plan for clean up to CSLC, CDFG and USFWS.	Reduces potential damage from oil spills. For large spills, significant impacts may remain.	CSLC, CDFG, and USFWS	Within 12 months of lease implementation.
	BIO-6e: If damage occurs, the last resort is restoration and compensation. Any loss of resources shall be documented as soon as possible after a large spill. The sampling methods and design should be determined beforehand, and the plan should include provisions for getting resources onsite as soon as possible so that post-spill studies can begin immediately.	Shore shall provide sampling methods and a design protocol plan to CSLC for review and approval. Shore shall provide documentation of damage as soon as possible after a large spill to CSLC, CDFG and USFWS.	This will ensure that the loss of resources is documented as soon as possible after a large spill event.	CSLC	Sampling methods and protocol within 12 months of lease implementation and update every 2 years. Documentation of damage as soon as possible after a spill.

**Table 8-3 (Continued)
Biological Resources**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria ^a	Responsible Agency	Timing
BIO-7: A significant impact to biological resources could result from spills of crude oil or product from a vessel in transit along tanker routes either in San Francisco Bay or outer coast waters.	BIO-7: Implement OS-8a and OS-8b of the Operational Safety/Risk of Upset section addressing potential participation in VTS upgrade evaluations, and Shore response actions for spills at or near the terminal.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

**Table 8-4
Commercial Fisheries**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
FSH-2: Invasive species discharged from ballast water could impair water quality (Impact WQ-2) and biological resources (Impact BIO-4) would also impair commercial and sports fishing activities in the Bay and outer coast.	FSH-2: Implement WQ-2 for ballast water management.	See WQ-2.	See WQ-2.	See WQ-2.	See WQ-2.
FSH-3: Shore contributes incrementally to water quality contamination and thus fish contamination, which could result in a loss of fishing opportunities because anglers prefer to stay away from contaminated fishing areas.	FSH-3: Implement WQ-3 and WQ-7 for preparation of a SWPPP and additional BMP's.	See WQ-3 and WQ-7.	See WQ-3 and WQ-7.	See WQ-3 and WQ-7.	See WQ-3 and WQ-7.
FSH-4: Space use conflicts between transiting vessels serving the Shore marine terminal could occur if commercial shrimp trawlers operate 12 hours or more per day during the fishing season.	FSH-4: Shore Terminals shall notify the shrimp trawlers operating in Carquinez Strait of increases in vessel transits associated with terminal operations. In addition, Shore shall inform incoming vessel operators of shrimp trawling activities near the terminal.	Shore shall demonstrate to CSLC their activities by providing copies of notices.	Reduces Shore-bound vessels potential for conflict.	CSLC	Annual reporting for life of lease.
FSH-5: Space use conflicts between transiting vessels serving the Shore marine terminal and commercial herring operators could occur resulting in interference or displacement of herring fishing activities.	FSH-5: Shore Terminals shall notify the herring fishery during the herring season of vessel transits. Shore shall also participate in the Pacific herring commercial fishery annual public scoping and hearing process, part of CDFG's annual review of herring commercial fishing regulations. CDFG has the authority to modify or develop regulations to address space use conflicts between the fishery and Shore's operations.	Shore shall demonstrate to CSLC their activities by providing copies of notices.	Reduces the potential damage to the Pacific herring commercial fishery.	CSLC and CDFG	Annual reporting for life of lease.

**Table 8-4 (Continued)
Commercial Fisheries**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
FSH-8: Significant impacts to commercial and sport fisheries in the Bay Estuary would result from oil spill accidents at Shore Terminals or from transiting tankers that service the terminal.	FSH-8a: Implement mitigation measures OS-3 through OS-6 in Operational Safety/Risk of Accidents, and mitigation measures BIO-6b through BIO-6d to lower the probability of oil spills and increase response capability.	See OS-3 through OS-6; BIO-6b through BIO-6d.	See OS-3 through OS-6; BIO-6b through BIO-6d.	See OS-3 through OS-6; BIO-6b through BIO-6d.	See OS-3 through OS-6; BIO-6b through BIO-6d.
	FSH-8b: Post notifications at spill sites and marinas, launch ramps and fishing access points to warn fishing interests of the locations of contaminated sites. Notices shall be written in English and Spanish and be posted in areas most likely to be seen by fishing interests.	CSLC monitor to observe notice postings.	Provides notification to local anglers of potential areas of contamination.	CSLC	Life of lease.
	FSH-8c: Provide financial compensation in accordance with the California Oil Spill Prevention and Response Act.	As per OSPR, to be commensurate with Shore's contribution of impacts.	Helps to fund programs for restoration or compensation.	OSPR	After a spill event, as warranted.
	FSH-8d: Contribute to independent public or private organizations acceptable to the CSLC, who evaluate the effectiveness of mitigation measures (results of the evaluation would be available to public decision-makers to ensure refinement, if necessary, modification of mitigation measures). Evaluation would be done only after an accident and would include monitoring using scientifically accepted protocols.	Shore shall demonstrate to CSLC their participation in relevant programs. Contributions would be determined by the level of impact and cooperation with the various organizations, agencies, and the CSLC.	Helps to develop more effective mitigation measures.	CSLC	Life of lease.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

**Table 8-5
Land Use**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria`	Responsible Agency	Timing
LU-3: Shoreline and water-related uses would be disrupted by oil on the shoreline and in the water and result in significant adverse impacts.	LU-3: Mitigation measures for spills at the Shore terminal would be the responsibility of Shore Terminals operations. Measures applies are those which are presented in other sections (Operational Safety/Risk of Upset; Water Quality; Biological Resources; and Commercial and Sport Fisheries).	Shore shall implement measures presented in Operational Safety/Risk of Upset; Water Quality; Biological Resources; and Commercial and Sport Fisheries.	Any residual impacts remaining after first response efforts would be considered to be significant impacts.	As per referenced measures.	As per referenced measures.
LU-4: Oil spills from vessels in transit through the Bay and outer coast could impact shoreline and water-related uses.	LU-4: Shore Terminals shall implement measures OS-8a and OS-8b in Operational Safety/Risk of Upset. Other mitigation measures for accidents in the shipping lanes would not be Shore Terminals responsibility, but would fall to the vessel operator/owner.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.

**Table 8-6
Air Quality**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria ^a	Responsible Agency	Timing
AQ-5: Tanker pumping, transit, and/or tug combustion emissions could allow for an increase in throughput at the marine terminal. Thus, future operational emissions (both indirect and direct) have the potential to exceed daily and yearly significance thresholds (existing permit limits).	AQ-5: Mitigation should be focused on the use of best available control technology (BACT) available at the time of any expansion of the upland facility. Increased operations would require additional permitting through the BAAQMD, which would set limitations on allowable emissions levels and require offsets as necessary.	Shore shall apply to abide by BAAQMD requirements for revisions to the existing permit or for new permitting.	Through the use of improved technology and BAAQMD requirements, the impact would be reduced to less than significant.	BAAQMD	At the time of increases in upland tankage capacity.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

**Table 8-7
Visual Resources**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria`	Responsible Agency	Timing
VR-2: Spills would change the color and texture of water and shoreline conditions. The visual impacts of a spill could last for a long period of time, depending on the level of physical impact and cleanup ability.	VR-2: Mitigation measures for oil spill impacts include those measures for contingency planning and response, as presented in Operational Safety/Risk of Upset and Biological Resources.	Shore shall implement measures presented in Operational Safety/Risk of Upset; Water Quality; Biological Resources; and Commercial and Sport Fisheries.	The measures provide for enhanced response capability and protection and would help to contain and cleanup small spills. Impacts may remain significant depending on the effectiveness of first response containment and clean-up.	As per referenced measures.	As per referenced measures.
VR-3: Spills would change the color and texture of water and shoreline conditions. The level of public sensitivity and expectations of viewers would result in a negative impression of the viewshed and result in significant impacts, depending on the various characteristics of a spill and its residual effects.	VR-3: Shore Terminals shall implement measures OS-8a and OS-8b in Operational Safety/Risk of Upset. Other mitigation measures for accidents in the shipping lanes would not be Shore Terminals responsibility, but would fall to the vessel operator/owner.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.	See OS-8a and OS-8b.

**Table 8-8
Geotechnical Resources/Structural Stability**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria ^a	Responsible Agency	Timing
GEO-2: The impact of berth dredging, natural scour or accumulation of soil in steep slopes near or adjacent to wharf piles should be considered in soil-structure interaction. In addition, liquefaction and lateral spreading resulting from any moderate earthquake may create a significant adverse impact.	GEO-2a: In the event that such scour has been noted, then Shore shall conduct additional analysis to evaluate the potential for lateral spreading. Loss of lateral support and laterally induced additional loads should be incorporated into the overall analysis and/or design. This analysis should be conducted concurrently with a site specific liquefaction analysis (see Impact GEO-3).	CSLC monitor to review and approve analysis recommendations and corrections.	Reduces potential for lateral spreading.	CSLC	Within 12 months of lease implementation.
	GEO-2b: Seismic evaluation of the structures and their foundations should be included in the structural analysis and geotechnical investigation in compliance with Section 6 of the approved MOTEMS. The results and recommendations of the evaluation shall be coordinated with the mooring analysis recommendations and implementation of corrections (see GEO-10).	CSLC monitor to review and approve analysis recommendations and corrections.	Reduces potential for damage to wharf by implementation of corrections.	CSLC	Within 12 months of lease implementation.
GEO-3: The site has not had an industry standard liquefaction evaluation performed. As such, the potential for impacts from seismically induced settlement are unknown but potentially significant.	GEO-3: Shore shall comply with the approved MOTEMS. As such, a site specific liquefaction evaluation shall be required to be completed within 6 months after start of the lease. The results and recommendations of the evaluation shall be coordinated with the mooring analysis recommendations and implementation of corrections (see GEO-10).	CSLC monitor to review and approve recommendations and corrections.	Reduces potential damage to structure from liquefaction.	CSLC	Within 6 months of lease implementation.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

Table 8-8 (Continued)
Geotechnical Resources/Structural Stability

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
GEO-4: Shore operators may not have adequate warning time to allow a vessel to depart from the wharf to avoid damage to the vessel and/or the wharf from a tsunami.	GEO-4a: As soon as possible, after notification of a tsunami, Shore operators shall release the vessel from its mooring and the vessel shall move away from the wharf.	Shore shall report to CSLC after a tsunami event.	Reduces damage to wharf and vessels from tsunami events.	CSLC	After a tsunami event.
	GEO-4b: Shore shall comply with Section 5 of the approved MOTEMS mooring analysis (see GEO-10).	See GEO-10.	See GEO-10.	See GEO-10.	See GEO-10.
GEO-8: During an earthquake damage could occur in the batter pile to bent cap connections and could damage the trestle.	GEO-8: Shore shall re-evaluate the loads on the bents, check the batter pile bolted connections, and adopt corrective measures.	Shore shall submit evaluation to CSLC for review, and schedule and implement any required corrections.	Reduces potential for damage due to poor batter pile bolted connections.	CSLC	Within 12 months of lease implementation.
GEO-9: The anchor bent batter pile to bent cap bolts are not capable of transmitting the predicted transverse seismic loads and could fail during an earthquake resulting in a significant adverse impact. The bolted connection in the anchor pile bents could result in loss of support for the petroleum lines and potentially initiate an oil spill.	GEO-9: The loads in the anchor bents should be re-evaluated and batter pile connections checked within 1 year. The anchor bents' inadequacy should be addressed and corrective measures implemented within 2 years.	Inspection by CSLC monitor to approve corrections.	Reduces potential for damage and oil spills.	CSLC	Timing as stated in measure.

Table 8-8 (Continued)
Geotechnical Resources/Structural Stability

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria ^a	Responsible Agency	Timing
GEO-10: The last mooring analysis used data from sites nearby that may not reflect actual wharf conditions. There could be impacts associated with berthing and mooring capacity under actual currents, tides and winds, with the potential for oil releases.	GEO-10a: Shore shall collect 12 months of data on currents, tide levels, and wind speed/direction at the wharf.	Shore shall submit data to CSLC.	Provides knowledge of the conditions proximate to the terminal.	CSLC	Within 12 months of lease implementation.
	GEO-10b: If data analysis shows that currents, tides and wind speeds are significantly different (as assessed by CSLC) from that assumed in the previous analysis, Shore shall conduct a new mooring analysis consistent with the approved MOTEMS Section 5 requirements.	Shore shall submit mooring analysis report to CSLC. Determine with CSLC schedule for any required corrections.	Reduces potential for damage to wharf and vessels.	CSLC	Within 12 months of lease implementation.
	GEO-10c: Shore shall conduct a passing vessel study for vessels navigating within 500 feet of the wharf, as per MOTEMS requirements.	Shore shall submit report to CSLC. Determine with CSLC schedule for any required corrections.	Reduces potential for damage to wharf and vessels.	CSLC	Within 12 months of lease implementation.
GEO-11: Pipeline stresses on the 30-inch pipeline in relation to movement of the loading platform and trestle, and on the pipeline expansion loop support interface along the trestle are unknown. The potential may exist for damage to the pipeline and oil leaks.	GEO-11a: Shore shall conduct a pipeline analysis on the 30-inch pipeline and the pipeline loop.	Shore shall submit pipeline analysis to CSLC for review, and schedule and implement any required corrections.	Reduces potential for damage to pipeline or trestle.	CSLC	Within 6 months of lease implementation.
	GEO-11b: Shore shall ensure that all pipelines for oil transfer meet MOTEMS and CSLC regulations in CCR Title 2, Division 3, Chapter 1, Article 5.5, Sections 2564 through 2570 for ensuring pipeline integrity.	CSLC to provide oversight by periodic inspections.	Assures pipeline integrity.	CSLC	Life of lease.

^a Impact Classes: Class I (significant, unmitigable); Class II (less than significant with mitigation incorporated); Class III (less than significant); Class IV (beneficial)

**Table 8-9
Environmental Justice**

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
EJ-1: Overall water quality, biological, and commercial and sport fisheries impacts would affect resources used by the entire Bay community, whether or not they are minority or low-income, and would therefore not have a disproportionate impact on a minority of low-income population, except for sport fisheries.	Should an oil spill from Shore Terminals extend beyond .5 mile from the terminal and preclude sport fishing activities for more than two days, Shore Terminals shall contribute either funds or food stuffs to a local food bank in an amount sufficient, as determined in conjunction with the CSLC, to replace food sources that would have been supplied by fishing activities within the affected areas.	Shore shall contribute funds or food stuffs to be determined in conjunction with the CSLC as per the mitigation measure.	Reduces impacts by replacing food sources.	CSLC	After an oil spill.